

Amendments to the Claims

1-12. **(canceled)**

13. **(previously presented)** A flat panel display comprising:
a front plate;
a rear plate;
a layer of liquid crystals and a TFT array layer, both interposed between said front and rear plates; and
at least one thermal sensor integral to the TFT array and hidden by an EMI layer to provide temperature sensing of said layer of liquid crystals.

14. **(original)** A flat panel display according to claim 13, wherein said at least one thermal sensor is comprised of an array of diodes.

15. **(cancelled)**

16. **(previously presented)** A flat panel display according to claim 13, wherein the at least one thermal sensor is applied onto the TFT array layer.

17. **(previously presented)** The flat panel display of claim 13, wherein:
the thermal sensor provides a nominal 2.5 volt to 5.0 volt change in bias potential as the liquid crystal temperature changes from – 60 degrees Celsius to 100 degrees Celsius.

18. **(canceled)**

19. **(previously presented)** The flat panel display of claim 13, wherein each at least one thermal sensor lies under the EMI layer.

20. **(previously presented)** The flat panel display claim 13, wherein the EMI layer is a black mask EMI layer.